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10/675,638

09/29/2003

Gautam G. Reddy

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07/28/2006

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DEPT. ICC

UNITED PLAZA, SUITE 1600

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EXAMINER

PHUONG, DAI

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/675,638 | Applicant(s) REDDY ET AL. | |
| | Examiner Dai A. Phuong | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/30/2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 10, 12-17, 19 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mark et al. (Pub. No: 20050181795) in view of Park (U.S. 5672549).

Regarding claim 1, Mark et al. disclose a communication method for a mobile wireless transmit receive WTRU (mobile WTRU) within a wireless network having geographic areas for preferred communication usage where the mobile WTRU can directly transmit and receive communication signals with a predetermined network station associated with a respective geographic area (fig. 3, [0035] to [0045]), comprising the steps of: relocating the WTRU to within said at least one preferred communication area such that the WTRU directly transmits and receives communication signals with the network station associated with said at least one

preferred communication area (fig. 3, [0035] to [0045]). However, Mark et al. do not disclose determining an estimated geographic location of a mobile WTRU; providing the mobile WTRU with position data relative to the determined mobile WTRU estimated location of at least one preferred communication area associated with a network station with which the WTRU cannot directly communicate at determined mobile WTRU estimation location; displaying the relative position data of said at least one preferred communication area to facilitate relocation of the mobile WTRU from the determined mobile WTRU estimated location to said at least one preferred communication area.

In the same field of endeavor, Park discloses determining an estimated geographic location of a mobile WTRU (fig. 1, col. 4, lines 12-19 and col. 5, lines 11-19); providing the mobile WTRU 40 with position data relative to the determined mobile WTRU estimated location of at least one preferred communication area associated with a network station with which the WTRU cannot directly communicate at determined mobile WTRU estimation location (col. 4, lines 1-57); displaying 100 the relative position data of said at least one preferred communication area to facilitate relocation of the mobile WTRU from the determined mobile WTRU estimated location to said at least one preferred communication area (fig. 1 to fig. 3, col. 5 lines 33-54 and col. 6, lines 17-32)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile WTRU of Mark et al. by specifically including determining an estimated geographic location of a mobile WTRU; providing the mobile WTRU with position data relative to the determined mobile WTRU estimated location of at least one preferred communication area associated with a network station with which the WTRU cannot

directly communicate at determined mobile WTRU estimation location; displaying the relative position data of said at least one preferred communication area to facilitate relocation of the mobile WTRU from the determined mobile WTRU estimated location to said at least one preferred communication area, as taught by Park, the motivation being in order to display direction and distance of travel to a designated geographic point of interest relative to a then-current vehicle location.

Regarding claim 10, the combination of Mark et al. and Park disclose all the limitations in claim 1. Further, Park discloses the method wherein the mobile WTRU is equipped with a global positioning system (GPS) and the mobile WTRU estimated location is determined by using the mobile WTRU global positioning system (GPS) (col. 4, lines 1-58).

Regarding claim 12, the combination of Mark et al. and Park disclose all the limitations in claim 1. Further, Park discloses the method further comprising the steps of: defining preferred communication areas by respective sets of geographical coordinates (col. 4 lines 1-11); storing said coordinate sets in a network database (col. 3, lines 1-19); and selectively transmitting from a network base station one or more of the data sets to provide the mobile WTRU with relative position data (col. 4 lines 1-58).

Regarding claim 13, the combination of Mark et al. and Park disclose all the limitations in claim 1. Further, Park discloses the method wherein the mobile WTRU is equipped with a map display, the method of further comprising the step of using relative position data to display a map of preferred communication areas relative to the estimated mobile WTRU location (col. 5 lines 33-54).

Regarding claim 14, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 15, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 16, the combination of Mark et al. and Park disclose all the limitations in claim 14. Further, Park discloses the mobile WTRU wherein the mobile WTRU receiver is configured to receive geographic location data corresponding to at least one pre-designated preferred communication area in the form of relative position data that is determined by the network, based on a mobile WTRU estimated location determined by the wireless network analyzing data related to physical properties of the mobile WTRU request transmission (col. 4 lines 1-57).

Regarding claim 17, the combination of Mark et al. and Park disclose all the limitations in claim 14. Further, Park discloses the mobile WTRU further comprising a global positioning system (GPS) that determines an estimated location of the mobile WTRU and that calculates relative position data based on geographic location data corresponding to at least one pre-designated preferred communication area serviced by the network received in response to a transmitted request (col. 4 lines 1-57).

Regarding claim 19, the combination of Mark et al. and Park disclose all the limitations in claim 14. Further, Park discloses the mobile WTRU further comprising a map display configured to visually display pre-designated preferred communication areas relative to the estimated mobile WTRU location (col. 4, lines 1-57).

Regarding claim 21, the combination of Mark et al. and Park disclose all the limitations in claim 14. Further, Park discloses the mobile WTRU wherein the mobile WTRU is configured

for wireless communication in a time division duplex (TDD) telecommunications system (col. 3, lines 1-48).

Regarding claim 22, the combination of Mark et al. and Park disclose all the limitations in claim 14. Further, Park discloses the mobile WTRU wherein the mobile WTRU is configured for wireless communication in a frequency division duplex (FDD) telecommunications system (col. 3, lines 1-48).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-7, 9, 11, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable Mark et al. (Pub. No: 20050181795) in view of Park (U.S. 5672549) and further view of Ben-Yehzekel et al. (U.S. 6049711).

Regarding claim 2, the combination of Mark et al. and Park disclose all the limitations in claim 1. However, the combination of Mark et al. and Park disclose do not disclose the method further comprising the steps of: initiating a request for a pre-designated preferred communication area location by the mobile WTRU transmission; and receiving the request by a network base station.

In the same field of endeavor, Ben-Yehzekel et al. disclose the method further comprising the steps of: initiating a request for a pre-designated preferred communication area

location by the mobile WTRU transmission; and receiving the request by a network base station (col. 4, lines 10-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the travel information device of Park by specifically including initiating a request for a pre-designated preferred communication area location by the mobile WTRU transmission; and receiving the request by a network base station, as taught by Ben-Yehezkel et al., the motivation being in order to provide information services and in particular to a method and apparatus for providing integrated location-based information services from a plurality of sources to a remote mobile subscriber WTRU.

Regarding claim 3, the combination of Mark et al. and Park and Ben-Yehezkel et al. disclose all the limitations in claim 1. Further, Park discloses the method wherein the mobile WTRU is equipped with a global positioning system (GPS), the mobile WTRU estimated location is determined by using the mobile WTRU's global positioning system (GPS) (col. 4 lines 12-35). Moreover, Ben-Yehezkel et al. disclose the mobile WTRU request transmission includes current mobile WTRU estimated location data, and the network base station transmits to the mobile WTRU relative position data that is determined by the network based on the current mobile WTRU estimated location data (col. 4, lines 49-58).

Regarding claim 4, the combination of Mark et al. and Park and Ben-Yehezkel et al. disclose all the limitations in claim 3. Further, Park discloses the method wherein the relative position data transmitted by the network base station to the mobile WTRU is determined by the network, based on the current mobile WTRU estimated location data and dynamic data of preferred communication area usage (col. 4 lines 1-58).

Regarding claim 5, the combination of Mark et al. and Park and Ben-Yehezkel et al. disclose all the limitations in claim 2. Further, Ben-Yehezkel et al. disclose the method wherein a current mobile WTRU estimated location is determined by the wireless network analyzing data related to physical properties of the mobile WTRU request transmission and the network base station transmits to the mobile WTRU relative position data that is determined by the network based on the current mobile WTRU estimated location data (col. 4, lines 10-33 and col. 7, lines 13-52).

Regarding claim 6, the combination of Mark et al. and Park and Ben-Yehezkel et al. disclose all the limitations in claim 5. Further, Ben-Yehezkel et al. disclose the method wherein the relative position data transmitted by the network base station to the mobile WTRU is determined by the network, based on the current mobile WTRU estimated location data and dynamic data of pre-designated preferred communication area usage (col. 4, lines 10-33 and col. 7, lines 13-52).

Regarding claim 7, the combination of Mark et al. and Park and Ben-Yehezkel et al. disclose all the limitations in claim 2. Further, Park discloses the method wherein the mobile WTRU is equipped with a global positioning system (GPS), the mobile WTRU estimated location is determined by using the mobile WTRU's global positioning system (GPS), the network base station transmits to the mobile WTRU geographic location data of all network pre-designated preferred communication areas serviced by the base station, and relative position data is determined by the mobile WTRU (col. 4 lines 1-58).

Regarding claim 9, the combination of Mark et al. and Park disclose all the limitations in claim 1. However, the combination of Mark et al. and Park do not disclose the method wherein the network monitors determined mobile WTRU estimated locations and relative position data is periodically transmitted to the mobile WTRU that is determined by the network, based on current mobile WTRU estimated location data and dynamic data of network usage.

In the same field of endeavor, Ben-Yehezkel et al. disclose the method wherein the network monitors determined mobile WTRU estimated locations and relative position data is periodically transmitted to the mobile WTRU that is determined by the network, based on current mobile WTRU estimated location data and dynamic data of network usage (col. 4, lines 10-33 and col. 7, lines 13-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the travel information device of Park by specifically including the network monitors determined mobile WTRU estimated locations and relative position data is periodically transmitted to the mobile WTRU that is determined by the network, based on current mobile WTRU estimated location data and dynamic data of network usage, as taught by Ben-Yehezkel et al., the motivation being in order to provide information services and in particular to a method and apparatus for providing integrated location-based information services from a plurality of sources to a remote mobile subscriber WTRU.

Regarding claim 11, the combination of Mark et al. and Park disclose all the limitations in claim 1. However, the combination of Mark et al. and Park do not disclose the method wherein relative position data is determined by the network based on the determined mobile

WTRU estimated location data and dynamic data of network usage data such that a ranked preference order of preferred communication areas is determined and relative position data at least a first preferred communication area preference is transmitted by a network base station to the mobile WTRU.

In the same field of endeavor, Ben-Yehezkel et al. disclose the method wherein relative position data is determined by the network based on the determined mobile WTRU estimated location data and dynamic data of network usage data such that a ranked preference order of preferred communication areas is determined and relative position data at least a first preferred communication area preference is transmitted by a network base station to the mobile WTRU (col. 4, lines 10-33 and col. 7, lines 12-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the travel information device of Park by specifically including relative position data is determined by the network based on the determined mobile WTRU estimated location data and dynamic data of network usage data such that a ranked preference order of preferred communication areas is determined and relative position data at least a first preferred communication area preference is transmitted by a network base station to the mobile WTRU, as taught by Ben-Yehezkel et al., the motivation being in order to provide information services and in particular to a method and apparatus for providing integrated location-based information services from a plurality of sources to a remote mobile subscriber WTRU.

Regarding claim 20, the combination of Mark et al. and Park disclose all the limitations in claim 14. However, the combination of Mark et al. and Park do not disclose the mobile

WTRU wherein the mobile WTRU is configured for wireless communication in a wireless local area network (WLAN).

In the same field of endeavor, Ben-Yehezkel et al. disclose the mobile WTRU wherein the mobile WTRU is configured for wireless communication in a wireless local area network (WLAN) (col. 4, line 49 to col. 5, line 50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the travel information device of Park by specifically including the mobile WTRU wherein the mobile WTRU is configured for wireless communication in a wireless local area network (WLAN), as taught by Ben-Yehezkel et al., the motivation being in order to provide information services and in particular to a method and apparatus for providing integrated location-based information services from a plurality of sources to a remote mobile subscriber WTRU.

6. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mark et al. (Pub. No: 20050181795) in view of Park (U.S. 5672549) and further view of Ben-Yehezkel et al. (U.S. 6049711) and further in view of Tsutsumi (Pub. No: 2004/0220995).

Regarding claim 8, the combination of Mark et al., Park and Ben-Yehezkel et al. disclose all the limitations in claim 1. However, the combination of Mark et al., Park and Ben-Yehezkel et al. do not disclose the method wherein the network permits direct mobile unit wireless communications with network base stations and also peer-to-peer wireless communications between mobile units and wherein the request initiated by the mobile unit and received by the

network base station is relayed via a different mobile unit located in a pre-designated preferred communication area serviced by the base station.

In the same field of endeavor, Tsutsumi discloses the method wherein the network permits direct mobile unit wireless communications with network base stations and also peer-to-peer wireless communications between mobile units and wherein the request initiated by the mobile unit and received by the network base station is relayed via a different mobile unit located in a pre-designated preferred communication area serviced by the base station ([0013]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the communication device of the combination of Mark et al., Park and Ben-Yehezkel et al. by specifically including the network permits direct mobile unit wireless communications with network base stations and also peer-to-peer wireless communications between mobile units and wherein the request initiated by the mobile unit and received by the network base station is relayed via a different mobile unit located in a pre-designated preferred communication area serviced by the base station, as taught by Tsutsumi, the motivation being in order to request the first information terminal to perform desired information processing by the second information terminal. Also to reach more users and for better coverage, e.g. indoor.

Regarding claim 18, this claim is rejected for the same reason as set forth in claim 8.

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mark et al. (Pub. No: 20050181795) in view of Park (U.S. 5672549) and further view of Ben-Yehezkel et al. (U.S. 6049711) and further in view of Shioda et al. (Pub. No: 20030078707).

Regarding claim 23, the combination of Mark et al. and Park and Ben-Yehezkel et al. disclose all the limitations in claim 14. However, the combination of Mark et al. and Park and Ben-Yehezkel et al. do not disclose the mobile WTRU wherein the user output device for alerting a mobile WTRU user of the relative position comprises a power use indicator that is active when the mobile WTRU is not physically located in a pre-designated preferred communication area where power consumption is relatively high.

In the same field of endeavor, Shioda et al. disclose the mobile WTRU wherein the user output device for alerting a mobile WTRU user of the relative position comprises a power use indicator that is active when the mobile WTRU is not physically located in a pre-designated preferred communication area where power consumption is relatively high.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the communication device of the combination of Mark et al. and Park and Ben-Yehezkel et al. by specifically including disclose the mobile WTRU wherein the user output device for alerting a mobile WTRU user of the relative position comprises a power use indicator that is active when the mobile WTRU is not physically located in a pre-designated preferred communication area where power consumption is relatively high., as taught by Shioda et al., the motivation being in order to detects the restricted area on the basis of whether the route retrieved by the navigation system passes through the restricted area or not. Also for better security and user awareness.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

Art WTRU: 2617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen M Duc can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-7503.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong
AU: 2617
Date: 07/17/2006



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